

## **CHAPTER 7.0**

### **HABITAT CONSERVATION PLAN**

---

This Habitat Conservation Plan (HCP) proposes to minimize and mitigate the potential effects associated with the issuance of a permit for incidental take pursuant to Section 10(a) of the ESA, and to ensure that issuance of the proposed incidental take permit does not appreciably reduce the likelihood of the survival and recovery of the desert tortoise (*Gopherus agassizii*), a federally and state-listed threatened species, pursuant to 50 CFR Part 17.32(b)(1)(iii). The conservation measures included in this HCP will be implemented throughout the 30-year life of the proposed project. Hyundai is responsible for implementing mitigation measures pertaining to the Facility and Highway 58 access road, and the City is responsible for implementing mitigation measures pertaining to the water pipeline extension.

“Covered Activities” under this HCP include the following: all of the proposed activities associated with the Facility, as described in Chapter 2; the access road from Highway 58, as described in Chapter 2; and the City water line extension and road improvements to Joshua Tree Boulevard, as described in Chapter 2.

#### **7.1 BIOLOGICAL GOALS AND OBJECTIVES**

The biological goals of the HCP are to enhance the long term viability of desert tortoise populations in the region of the proposed project to enhance the probability of the recovery of the desert tortoise.

To meet the biological goals, the biological objectives of the HCP are to:

- Increase the area of protected and conserved habitat for the desert tortoise in the region of the proposed project;
- Enhance the value of the protected and conserved habitat for the desert tortoise;
- Provide for maintenance of the protected and conserved habitat for the desert tortoise in perpetuity, and;
- Avoid and minimize direct take of desert tortoise due to project construction and operation.

The following tasks are designed to meet the goals of the HCP:

- Relocate desert tortoises from the proposed project area prior to construction.
- Conduct worker education.
- Exclude tortoises from the project site following relocation efforts.
- Implement construction measures to minimize adverse effects to desert tortoise.
- Implement measures intended to prevent an increase in Common Raven predation.

Implementation of the following mitigation measures will satisfy the biological goals and objectives of the HCP.

### **7.1.1 Avoidance and Minimization Measures**

The following measures have been proposed by Hyundai and the City as part of the proposed project, to minimize and mitigate incidental take of desert tortoise:

- Preconstruction measures
- Recovery and relocation
- Habitat compensation
- Construction-avoidance measures
- Post construction monitoring

#### **7.1.1.1 Preconstruction Measures**

DT-1. As a means of minimizing impacts to desert tortoise, prior to the initiation of construction activities within the proposed project site, Hyundai and the City shall stake all proposed construction work areas, implement a worker education program, and conduct preconstruction surveys to identify inactive and active desert tortoise burrows within the proposed project site. Staking shall be verified by a biological monitor. "Authorized biologist" or "biological monitor" is a person or persons working pursuant to MOUs and Section 10(a) permits issued for the proposed project by the CDFG and USFWS. A "monitor" is a person with education and experience in working with desert tortoise, but who has no authority to handle a desert tortoise. A written report shall be submitted to the USFWS and the CDFG by the authorized project biologist verifying compliance with this measure.

DT-2. As a means of minimizing impacts to desert tortoise, Hyundai and the City shall require that all proposed construction staging areas, parking areas, and project elements be surveyed and clearly flagged by a registered surveyor prior to the initiation of preconstruction surveys. Compliance shall be verified by a biological monitor. A written report shall be submitted to the USFWS and the CDFG by a biological monitor verifying compliance with this measure.

DT-3. As a means of minimizing impacts to desert tortoise, prior to the initiation of construction activities, Hyundai and the City shall require that an authorized biologist develop and administer a worker education program for all construction personnel. Construction crews, foremen, contractors, subcontractors and other personnel potentially working on the proposed project site shall undergo the education program to familiarize themselves with the particular biological restrictions and conditions of the area.

Practices and information covered by this program shall include speed limits, firearm prohibition, encounters with desert tortoise, staying within designated construction areas, pet prohibition, agency notification, checking under vehicles, trash and litter management, training on special status species within the project area, species and habitat identification, techniques to avoid impacts to species, consequences of taking a listed species, and reporting procedures when encountering listed or sensitive species. An incentive program

will be implemented into the worker education program to encourage on-site workers to report observations of tortoise to an authorized biologist. The text of the worker education program shall be submitted to the USFWS and the CDFG at least 10 working days prior to the initiation of construction.

Workers shall receive a sticker or certificate that they have completed the training. A construction monitoring notebook shall be maintained on site throughout the construction period and shall include, at a minimum, a copy of the Section 10(a) permit for incidental take, a copy of the CESA Section 2081(b) incidental take permit, the Habitat Conservation Plan, the Mitigation Monitoring and Reporting Plan adopted by the City, and a list of signatures for all personnel who have successfully completed the worker education program. The authorized biologist shall demonstrate compliance with this measure by sending a copy of the education program and a copy of the construction monitoring notebook, including a list of the names of workers who have completed the required worker education program, to the USFWS and the CDFG on an annual basis.

#### **7.1.1.2 Recovery and Relocation**

DT-4. As a means of minimizing impacts to desert tortoise, the authorized biologist shall recover and relocate all desert tortoise encountered within the proposed project site in accordance with the Translocation Program attached in Appendix A, *Draft Desert Tortoise Translocation Program*. Handling of desert tortoise shall be performed according to *Guidelines for Handling Desert Tortoises during Construction Projects* to minimize stress and spread of disease.<sup>1</sup>

All desert tortoise handling shall be done only by an authorized biologist.

As stated in *Guidelines for Handling Desert Tortoises During Construction Projects*, the following information shall be collected when processing a live tortoise encountered during clearance surveys:

- Tortoise number
- Numbered scute
- Weight
- Sex
- MCL/PLN measurement, width and maximum height
- Photos of carapace, plastron, frontal, and numbered scute
- Health profile including nasal description breathing and URTD determination, posture and behavior, shell disease and signs of trauma
- Project identification including date, project name, biological monitor or authorized biologist's name, location (state, county, USGS quadrangle)

---

<sup>1</sup> E.L. LaRue (Ed.), 1994 (Revised 1999). *Guidelines for Handling Desert Tortoises During Construction Projects*. Wrighwood, CA: Desert Tortoise Council.

- Project description including topography, soil type, vegetation and location found
- Tortoise burrow data including time of excavation, burrow number, temperature during excavation, burrow width, height, length, orientation and condition

The authorized biologist shall submit the above information to the USFWS and CDFG within 14 days of the completion of desert tortoise clearance surveys.

#### **7.1.1.3 Construction and Operations Avoidance Measures**

Hyundai and the City shall implement the following measures to avoid impacts to desert tortoise during construction and operation of the proposed project.

DT-5. As a means of minimizing impacts to desert tortoise, an authorized biologist shall survey all work, staging and construction areas, rights-of-way within the proposed project site and water line extension site and remove all desert tortoise found within those areas prior to the start of construction activities (i.e., grubbing, grading, trenching) to ensure maximum avoidance of impacts to desert tortoise and their burrows. All construction staging areas will be enclosed by temporary desert tortoise exclusion fencing and cleared of desert tortoise prior to staging of construction equipment or vehicles. In the alternative, some narrow areas may be intensively monitored in the absence of fencing by a sufficient number of authorized biologists to prevent death or injury to tortoises.

Preconstruction surveys shall be undertaken in three phases: (1) the oval track and oval track interior, which would then be surrounded by temporary desert tortoise exclusion fencing; (2) the alignment of the perimeter desert tortoise exclusion and safety fencing; and (3) the remainder of the project site. The authorized biologist shall submit proof of compliance with this measure, including a survey report, to the CDFG and USFWS. Temporary exclusion fencing will remain in place until the entire project site has been cleared and the desert tortoise exclusion fencing around the perimeter of the site has been installed.

All desert tortoise burrows, as well as large mammal burrows that could be used by desert tortoise, shall be flagged in work, staging and construction areas, rights-of-way within the proposed project site and the water line extension site. Inactive burrows shall be collapsed within those areas. The authorized biologist shall submit proof of compliance with this measure to the USFWS and CDFG. Recovery and relocation of desert tortoises encountered during preconstruction surveys shall be performed in accordance with the Translocation Program attached as Appendix A.

DT-6. As a means of minimizing impacts to desert tortoise, Hyundai and the City shall construct desert tortoise exclusion fencing prior to initiating any ground-disturbing activity within an area of the proposed project site. In the alternative, some narrow areas may be intensively monitored in the absence of fencing by a sufficient number of authorized biologists to prevent death or injury to tortoises. All construction staging shall be undertaken in areas of lower quality habitat or areas that exhibit signs of disturbance. All

staging areas and fencing shall be inspected and approved by an authorized biologist prior to the initiation of construction activities. Additionally, an authorized biologist will be present during all construction activities to inspect the staging areas on a regular basis and to inspect the underside of vehicles prior to moving. Proof of compliance with this measure shall be verified by an authorized biologist and shall be submitted in writing to the USFWS and the CDFG.

DT-7. As a means of minimizing impacts to desert tortoise, Hyundai and the City shall have an authorized biologist present throughout the construction period to monitor removed and relocated desert tortoises and to remove any additional desert tortoises encountered during construction for both the Facility and water line extension. The authorized biologist will have the authority to halt construction activities that have the potential to impact a desert tortoise for the purpose of relocating the tortoise. Desert tortoises encountered during construction shall be removed and relocated in accordance with the Translocation Program attached as Appendix A.

DT-8. As a means of minimizing impacts to desert tortoise, Hyundai and the City shall post speed limits of 20 miles per hour (mph) and strictly enforce speed limits within the project construction area for the entire construction period. However, should the air temperature rise above 104°F prior to 12:00 p.m. an authorized biologist shall be allowed to suspend the 20 mph speed limit for that day, or until the air temperature falls to 104°F or below. The air temperature is taken 40 cm above ground in the shade and protected from wind.<sup>2</sup>

DT-9. As a means of minimizing impacts to desert tortoise, Hyundai and the City shall prohibit firearms and pets within the proposed project site.

DT-10. As a means of minimizing impacts to desert tortoise during construction, Hyundai and the City shall implement dust control measures on access roads and construction areas.

DT-11. As a means of minimizing impacts to desert tortoise during routine operation and maintenance of the proposed project, Hyundai and the City shall conduct an annual worker education program for the regularly scheduled on-site personnel for the first five years of the project life, as described in DT-3; conduct post-construction monitoring as prescribed in DT-13, and have an authorized biologist on call to remove and relocate any desert tortoise encountered during the five years following completion of construction. Hyundai also shall maintain the security and desert tortoise exclusion fencing throughout the life of the proposed project.

---

<sup>2</sup> Phil Medica, USFWS; Ken Neuseur, UNR; Carol Watson, USFWS. 12 June 2003.

#### **7.1.1.4 Common Raven Management Plan**

RA-1. To minimize impacts to desert tortoise during construction and operation of the Facility, Hyundai and the City shall undertake the following measures to prevent an increase in the common raven (*Corvus corax*) population in the vicinity of the proposed project site and to decrease the attractiveness of the proposed project site to Common Ravens.

- Hyundai and the City shall implement a trash and litter management program that reduces the availability of solid waste. Trash receptacles on site shall be covered with a solid lid at all times, and instructional signage shall be placed in public areas of the site to encourage proper disposal of trash. Proof of compliance with this measure shall be verified by the authorized biologist and submitted in writing to the USFWS and CDFG.
- The security fencing and above ground utility structures shall be designed to inhibit Common Ravens and birds of prey from using them as perch sites. To prevent birds from perching on fenceposts or utility structures, the fenceposts and structures would be topped with nixalite, sharp, intertwined, stainless steel spikes standing at upward angles, with an upright, 8-inch metal spike welded in the center of each fencepost or structure. To prevent birds from perching on the fencing, two flexible wires would be loosely strung between the metal spikes on the fenceposts, with one wire approximately 3 inches above the top of the fence, and the other wire approximately 8 inches above the fence.
- Sources of standing water such as leaking faucets, irrigation lines, stock tanks, or car wash stations shall be avoided and eliminated whenever possible, as these unnatural sources of water may attract common ravens.
- Roadkill wildlife found within the project site shall be immediately removed and properly disposed.
- Anti-common raven measures, such as hazing, will be undertaken following construction, and other non-lethal measures shall be undertaken to control the presence of common ravens that are thought to be preying on juvenile tortoises, including the removal of inactive common raven nests within and adjacent to the Facility. Any common raven nest will be removed by a wildlife biologist approved by the USFWS and CDFG.

#### **7.1.1.5 Postconstruction Measures**

DT-13. Hyundai and the City shall conduct monthly postconstruction monitoring in the year following construction of the proposed project and annual monitoring for five years after construction is complete. Monitoring shall consist of surveys of all operational areas using 30-foot transects to assure 100 percent coverage of the operations area, security and desert tortoise fencing. The operations area shall consist of the oval track and the internal area of the oval track, all paved roads within the project site, and all unpaved roads normally used for operations and maintenance activities in support of the test track, all Facility sites, and the entire perimeter fence. Any desert tortoise encountered during postconstruction surveys shall be processed in accordance with the Translocation Program

attached as Appendix A. An authorized biologist shall submit monitoring information to USFWS and CDFG within 30 days of the completion of the first year of postconstruction monitoring, and annually thereafter. Performance of two consecutive postconstruction surveys during the active period of desert tortoise shall be considered sufficient to declare the site free of tortoise. When the site is declared free of tortoise, no more on-site monitoring or construction worker education shall be deemed necessary. The authorized biologist shall notify the USFWS and CDFG in writing within 2 weeks of confirming that the site is free of tortoise.

The handling of desert tortoises shall be in compliance with USFWS and CDFG protocols and with the Translocation Program, attached as Appendix A. All desert tortoises shall be processed in accordance with the specifications provided in the Translocation Program. Should any desert tortoise be encountered during postconstruction surveys, the authorized biologist shall notify the USFWS and CDFG within 24 hours.

DT-14. Hyundai and the City shall have an authorized biologist on call to remove any desert tortoise encountered during the five years following construction. All regularly scheduled on-site personnel shall be instructed, as part of the worker education program, on the protocol for contacting the authorized on-call biologist to remove any desert tortoise encountered in a work area.

DT-15. Hyundai and the City shall maintain the security/ desert tortoise exclusion fencing and rain gauges, throughout the life of the project. Hyundai and the City shall inspect the security/ desert tortoise exclusion fencing and rain gauges on a monthly to twice-monthly schedule during the first year following commencement of project construction, and monthly throughout the life of the project unless CDFG and USFWS concur that fence inspection may occur less frequently, and shall replace or repair the fencing and gauges as necessary to exclude desert tortoises from the project site. An approved biologist shall submit annual inspection reports to the USFWS and CDFG. A copy of the annual inspection shall be retained on site and shall be available for inspection by the USFWS and CDFG within two working days of a request for review.

### **7.1.2 Habitat Compensation**

DT-16. Hyundai and the City shall compensate at a ratio of 1:1 for impacts to desert tortoises. Hyundai shall compensate for approximately 3,208.5 acres of desert tortoise habitat within the proposed project site. Impacts to desert tortoise habitat, and required mitigation acreage to compensate for those impacts, were determined as follows: 4,340 acres of habitat that desert tortoise will be excluded from following fencing, plus 8.5 acres of impact outside of the project description for the new access road, minus 1,140 acres of land previously mitigated through the LTA, that for a total mitigation requirement of 3,208.5 acres. Thus, at a ratio of 1:1, Hyundai shall purchase a total of 3,208.5 acres.

The City shall be responsible for acquiring 20 acres to compensate for impacts to approximately 20 acres of desert tortoise habitat associated with construction of the proposed 118-foot-wide, approximately 2-mile-long water line extension.

In total, Hyundai and the City propose to mitigate for impacts to 3,228.5 acres of desert tortoise habitat. At a 1:1 ratio, compensation totals 3,228.5 acres.

Lands proposed for acquisition as compensation for desert tortoise impacts shall be approved by both the USFWS and CDFG prior to purchase, as set forth in the draft Land Acquisition Management Plan, Appendix H, *Draft Proposed Land Acquisition Implementation Plan*, and the draft Management Agreement, Appendix E, *2003 Desert Tortoise Preserve Committee Management Plan, Desert Tortoise Natural Area & Adjacent Lands*, and also shall be suitable as compensation lands for Mohave ground squirrel. Compensation lands acquired may be transferred to a third party conservation organization acceptable to the USFWS and CDFG. Hyundai and the City shall ensure adequate funding for acquisition, enhancement and long-term management of the compensation lands in an amount to be agreed upon by USFWS, CDFG, Hyundai, the City and DTPC if applicable.

The compensation lands will be acquired by Hyundai and the City, or by a third party conservation group such as the DTPC acting on behalf of Hyundai and the City, with prior approval of USFWS and CDFG. The compensation lands are proposed to be acquired in an area adjacent to the Desert Tortoise Natural Recovery Area and would be incorporated into that preserve area. The compensation lands may be managed by the DTPC, the group currently managing that area, or by CDFG, upon agreement by USFWS and CDFG.

Lands cannot be transferred prior to project initiation because of the sensitive time line for the start of the proposed project. However, Hyundai has proposed to establish a letter of credit or set aside the necessary funds in an escrow account to provide the USFWS and the CDFG with assurance that the funding is in place for acquisition, enhancement, and endowment for long-term management. The terms of any letter of credit or escrow account must be approved by USFWS and CDFG and USFWS and CDFG must have access to any escrow account established to provide funding assurance for acquisition, enhancement and long-term management of the compensation lands.

### **7.1.3 Acquisition of Compensation Habitat**

#### **Hyundai**

Not later than 12 months after the initiation of any habitat-disturbing activities (1) Hyundai will acquire and transfer, either to the CDFG or to a third party organization approved by the USFWS and CDFG, a fee or conservation easement interest in 3,208.5 acres approved by USFWS and CDFG as having habitat value for desert tortoise and Mohave ground squirrel that is greater than the habitat value that will be impacted by the Covered Activities, or (2) Hyundai will provide to the USFWS, CDFG, or the approved third party organization, an amount sufficient to acquire the compensation lands, enhance the compensation lands, if necessary, and endow a permanent non-wasting fund for the management of the transferred lands or easement interest. This financial assurance is described more fully in Chapter 8. Adequate funds will be provided in a letter of credit or placed in an escrow account to ensure that funding is available for the acquisition, enhancement, and long-term management of the proposed compensation lands. The proposed compensation lands will be acquired by Hyundai, or by a third party such as the Desert Tortoise Preserve Committee acting on behalf of Hyundai, upon approval of each parcel by the USFWS and CDFG. Either the third party or CDFG will handle enhancement and long-term management of the



compensation lands. Lands cannot be transferred prior to project initiation because of the sensitive time line for the start of the proposed project.

### **The City**

Not later than 12 months after the initiation of any habitat-disturbing activities, the City will provide habitat compensation by implementing one of the following two alternatives: (1) the City will acquire and transfer, either to the CDFG or to a third party organization approved by the USFWS and CDFG, a fee or conservation easement interest in 20 acres approved by USFWS and CDFG as having habitat value for desert tortoise and Mohave ground squirrel that is greater than the habitat value of the lands that will be impacted by the Covered Activities, or (2) the City will provide to the USFWS, CDFG, or an approved third party organization, an amount sufficient to acquire the compensation lands, enhance the compensation lands, if necessary, and endow a permanent non-wasting fund for the management of the transferred lands or easement interest. This financial assurance is described more fully in Chapter 8. Adequate funds will be provided in a letter of credit or placed in an escrow account to ensure that funding is available for the acquisition, enhancement, and long-term management of the proposed compensation lands. The proposed compensation lands will be acquired by the City, or by a third party such as the Desert Tortoise Preserve Committee acting on behalf of the City, upon approval of each parcel by the USFWS and CDFG. Either the third party or CDFG will handle enhancement and long-term management of the compensation lands. Lands cannot be transferred prior to project initiation because of the sensitive time line for the start of the proposed project.

Hyundai and the City shall submit the following to the USFWS and CDFG for review and approval prior to the initiation of any habitat-disturbing activities:

- The specific habitat lands or credits to be acquired, the specific steps necessary to acquire and transfer land or to purchase habitat credits, and the specific steps necessary to provide enhancement and management funds for acquired lands.
- A contingency plan to be implemented in the event that off-site mitigation lands suitable for desert tortoises are not suitable or provide only marginal habitat for the desert tortoise. Should the proposed compensation lands not prove suitable for desert tortoise, Hyundai and the City will notify and work closely with the CDFG and USFWS to identify and acquire suitable compensation lands. Hyundai and the City have provided a Reclamation Plan that includes relocation of tortoises to the nearest desert tortoise preserve area, or to the nearest desert tortoise critical habitat, or to CDFG and USFWS approved research projects, or to the habitat compensation area, as designated and approved by both the CDFG and USFWS. Compensation lands will not be purchased without prior approval of both the CDFG and the USFWS, and relocation will be accomplished only with permission of both agencies, in a manner approved by both agencies. Should tortoises need to be held in captivity for longer than one night, the Translocation Program would be followed.

- A schedule for completion of the steps identified no later than 12 months after the initiation of habitat-disturbing activities.

#### **7.1.4 Replacement of Habitat Values With Compensation Lands**

##### **Habitat Values Lost**

Issuance of the proposed incidental take permit and the subsequent implementation of the proposed project would result in impacts to 3,228.5 acres of Category III desert tortoise habitat and impacts to individual desert tortoises. As prescribed by BLM, each of the desert tortoise habitat categories is based on how essential an area is to the maintenance of viable tortoise populations, whether conflicts with existing or proposed land practices are resolvable, the density of existing tortoise populations on the property, and whether the existing tortoise population numbers are increasing, stable, or decreasing.

The proposed measures in this HCP would minimize impacts to desert tortoises within the proposed project site through the use of preconstruction surveys to translocate all tortoises within the proposed impact area to appropriate habitat designated by USFWS and CDFG as suitable for translocation. All tortoises will be inspected for disease prior to relocation. Those determined not to be suitable for translocation will be placed for adoption by the resource agencies.

##### **Habitat Values Gained through Compensation**

Hyundai and the City shall acquire compensation lands at a 1:1 ratio for impacts to 3,228.5 acres from the proposed project, resulting in the acquisition of 3,228.5 acres of Category I or II desert tortoise habitat that is adjacent to the existing Desert Tortoise Research and Natural Area (DTRNA). Category I or II desert tortoise habitat is classified by the BLM as habitat essential to the maintenance of large, viable populations, having resolvable land use conflicts, medium to high density populations or low densities contiguous with medium or high density, and increasing, stable, or decreasing population numbers. The mitigation lands will expand the DTRNA into adjacent high quality habitat that is managed for desert tortoise and other sensitive floral and faunal species.

The proposed compensation lands are sites north of the City of California City and east of the Desert Tortoise Natural Area and will be situated away from State Highway 58 and other major highways that could result in tortoise mortalities and fragmentation of tortoise populations. State Highway 58 is not intersected by other major highways within the project vicinity, thereby providing a natural buffer of the core desert tortoise population. As described in the Desert Tortoise Preserve Committee Management Plan for the Desert Tortoise Natural Area and Adjacent Lands ("DTPC Management Plan"), attached as Appendix E, these lands include a broad range of biological resources, including Mohave creosote bush scrub habitat, which is known to support desert tortoise populations. Surveys conducted in 2000 indicated the presence of desert tortoises. A Property Analysis Record (PAR) recently conducted by the DTPC in an area adjacent to the proposed acquisition area also describes the presence of desert tortoise (Appendix F, *Desert Tortoise Preserve Committee Property Analysis Record*). The compensation lands would further protect the core desert tortoise populations within the DTRNA by providing a larger buffer between

the DTRNA and lands that are proposed for development or other uses not compatible with desert tortoise use or occupation. Overall, the value of the compensation lands will be greater than those that would be impacted by the proposed project due to the larger amount of acreage, the location of the compensation lands adjacent to areas currently being managed for desert tortoise, and the isolation of the compensation lands from major highways and urban areas that reduce the suitability of lands to support desert tortoise populations.

## **7.2 ADAPTIVE MANAGEMENT**

Adaptive management is a process that allows the established management practices of a conservation program to be modified during the life of the program. It provides a mechanism to incorporate new scientific information or respond to the results of monitoring to achieve the biological goals and objectives of the conservation program.

Adaptive management uses feedback from monitoring to assist in a decision-making process to modify management practices. Incorporating new monitoring information is necessary to effect changes in management to achieve the biological goals and objectives of this HCP and the mitigation lands.

Future modifications to management practices, through the adaptive management process, may be needed as a result of the following:

- New information resulting from ongoing research, monitoring of mitigation measures, or monitoring of mitigation lands or other lands supporting desert tortoise
- Recovery strategies set forth in updates or revisions to the USFWS Desert Tortoise Recovery Plan that could differ from the measures currently employed
- Minimization and mitigation measures described in the HCP that may need to be revised based on new information or monitoring data
- Significant land use changes outside of the compensation lands that result in a direct effect on the compensation lands

Each of these situations may result in new information, new approaches, or new recovery or conservation standards that would need to be incorporated into the management practices for the mitigation lands.

When monitoring results or new scientific information indicate that existing management practices are not achieving the biological goals and objectives of this HCP or the mitigation lands, the management practices should be modified in order to meet the goals and objectives. This adaptive management will be implemented independently by the permittees, managers of the mitigation lands with the concurrence of USFWS and CDFG, or at the direction of the USFWS or CDFG.

The management practices will be modified as soon as practicable, and no later than 30 days, after determining that the goals and objectives of the HCP or the mitigation lands are not being achieved. Adaptive management changes that may result in less mitigation for covered species will not be implemented unless the USFWS first provides written approval.

The adaptive management program will identify the probable reasons that goals and objectives are not being achieved, develop alternative management strategies based on the best available scientific information, assess the alternatives in light of site conditions, implement a preferred management strategy, monitor the results of the strategy, and revise the strategy if monitoring indicates that goals and objectives are still not being achieved. Criteria for assessing significant changes to the compensation lands habitat would include a 10 percent alteration of habitat including non-native invasive plants, drought that reduces plant cover by 10 percent, a 10 percent increase in the number of non-native wildlife, unauthorized human activities that disturb at least 10 percent of the habitat, or a 10 percent drop in the baseline population level of desert tortoise. Changes in habitat conditions shall be tracked annually through the use of aerial photographic surveys and desert tortoise population monitoring. The baseline aerial photograph is recommended to be flown at the time the compensation lands are fenced.

An approved biologist will recommend appropriate changes in management practices. Changes in management practices will be based on the best available scientific information.

Any adaptive management that is necessary on mitigation lands will be instituted by the conservation manager of the compensation lands. The management of those lands will not be under the direction or control of Hyundai or the City, thus the adaptive management measures described in this HCP are recommendations that should be adopted by the compensation land managers.

The baseline assessment and monitoring on the compensation lands will be accomplished by the third party conservation organization put in charge of managing the land, to be funded by Hyundai and the City through enhancement and endowment fees paid on a per-acre basis as described in mitigation measure DT-16.

A complete administrative record of all changes in management practices due to adaptive management should be maintained by the compensation lands manager.

### **7.3 MONITORING**

#### **Permittees' Responsibilities**

Hyundai and the City shall be responsible for monitoring during all phases of project construction and operation. Monitoring shall be performed in accordance with the methods set forth in this EA/HCP, the EIR, IA, and the Incidental Take Permit, as issued by the USFWS. Monitoring shall be funded by Hyundai and the City as described in Chapter 8 of this EA/HCP.

Hyundai and the City shall demonstrate compliance with monitoring responsibilities by submitting reports to the USFWS and CDFG, in accordance with the terms of this EA/HCP and the ITP. Should circumstances change, monitoring practices will assist in determining the nature and extent of any

change, and are flexible to allow for modification as necessary, including incorporation of new scientific knowledge. Modification of monitoring practices would be accomplished in coordination with CDFG, USFWS, Hyundai, and the City.

### **Compensation Lands**

Management of compensation lands will be accomplished by the third party responsible for managing the lands. This third party will be chosen and agreed upon by the USFWS, CDFG, Hyundai, and the City. Monitoring performed by this third party would consider the effectiveness of the implementation of the HCP and would report on the progress of the biological goals and objectives.

## **7.4 PERMIT DURATION**

The duration of the Section 10(a) permit issued by USFWS will be for 30 years, the proposed life of the project. Hyundai anticipates using the automotive test track Facility for 30 years, and the project site is located within an area that is anticipated to be highly developed in the next 10-20 years. Impacts to desert tortoise resulting from the proposed project will occur primarily during the construction phase. A 30-year operating life for the permit therefore will not have a significant long-term impact on this species. The proposed compensation program for impacts to desert tortoise also will increase the long-term survivability of these listed species and enhance their habitats by providing compensations lands with a higher habitat value than the habitat impacted by the proposed project.

## **7.5 PUBLIC PARTICIPATION**

In accordance with 50 CFR 17, a Notice of Availability will be published in the Federal Register announcing the receipt of the completed HCP/EA and the commencement of a 60-day public comment period.